Remarks

Reconsideration of the present application is hereby requested.

Claims 1 to 36 were pending in this application.

Claims 1 to 14 have been withdrawn from further consideration pursuant to 37 C.F.R. § 1.142(b) as being drawn to a nonelected invention.

Claims 15, 21, 22, 27, and 28 have been amended. More specifically, these claims have been amended to replace the term "bondable" with the phrase "grafted or modified". Support for these amendments can be found in paragraph number [0039] of the application, as filed. No new matter has been added.

New claim 37 has been added. Support for new claim 37 can be found in paragraph numbers [0015] and [0039] of the application, as filed. Again, no new matter has been added.

Claims 15 to 37 are currently pending in this application.

The undersigned wishes to thank the Examiner for the courtesy extended in granting the telephone interview of Wednesday, February 8, 2006, during which the present Amendment was discussed.

In regard to the rejection of claims 15 to 17 and 29 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,453,097 to Newton *et al.*, Applicant submits that this ground for rejection is untenable and should be withdrawn. Nothing in Newton *et al.*, alone or in any permissible combination, teaches or even remotely suggests the fiber optic cable of claims 15 to 17 and 29, as amended.

The present invention generally relates to a low smoke, low toxicity fiber optic cable that facilitates bonding to optical connectors such as LC connectors. More specifically, the present invention relates to a low smoke, low toxicity fiber optic cable that comprises:

(1) at least one optical fiber;

(2) a primary buffer member circumferentially surrounding each optical fiber;

(3) a secondary buffer member circumferentially surrounding the primary buffer member, where the secondary buffer member is prepared from, or has an outer surface or layer prepared from, a material selected from the group of bondable polyimides and grafted or modified fluoropolymers;

(4) a strength member circumferentially surrounding the secondary buffer member; and

(5) an outer protective jacket circumferentially surrounding the strength member,

where, when tested in accordance with Boeing Specification Support Standard BSS 7324 (December 2, 1998) Smoke Emission Test Method, the cable produces, at four minutes in the flaming mode, a smoke with a specific optical density of less than 100.

The secondary buffer member offers added mechanical protection to the optical fiber(s) and exhibits low axial shrinkage, while providing an outer surface that can be effectively bonded to ceramic ferrules used in LC connectors by way of conventional epoxy adhesives.

Newton *et al.* teach an optical fiber minicord cable 20 that comprises a conventional minicord arrangement 38 (*e.g.,* buffered optical fiber 32, which includes buffer region 28, a first strength layer 34 formed around the buffered optical fiber 32, and a first protective jacket or layer 36 formed around the strength layer 34), a second strength layer 42 formed around the conventional minicord arrangement 38, and a second protective jacket 44 formed around the second strength layer 42.

Reference to poly(vinylidene fluoride) (PVDF) and poly(vinyl chloride) (PVC) as materials suitable for use in forming buffer region 28 of buffered optical fiber 32 constitutes nothing more than a general teaching. In fact, this reference teaches several other materials that may also be used to form buffer region 28, namely, nylon (*e.g.,* nylon 12 or Huls 1670 nylon), polyolefin, and polyester. *See* Col. 3, lines 41 to 46, of Newton *et al.*

Moreover, there is no need and thus no incentive to improve the bonding capability of the thermoplastic material used to form buffer region 28, where buffer region 28 does not

appear to participate in the connection of cable 20 to LC or ST connectors (*see* Col. 3, lines 52 to 57 of Newton *et al.*).

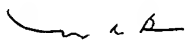
In view of the above, Newton *et al.* fails to teach or even remotely suggest the use of grafted or modified fluoropolymers in the buffer region 28 of its buffered optical fiber 32. As such, this reference cannot be said to anticipate claims 15 to 17 and 29, as amended. Applicant therefore respectfully requests that this ground for rejection be withdrawn.

Claims 18 to 28 and 30 to 36 have been deemed allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Applicant submits, however, that where these claims now depend from an allowable base claim, they too should be considered allowable in their present form.

New claim 37 limits the grafted or modified fluoropolymer to maleic anhydride grafted ethylene-tetrafluoroethylene (ETFE) copolymers, and as such should be deemed allowable.

Early reconsideration of the subject patent application in view of the above amendments and remarks is respectfully requested. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Respectfully submitted,



Mary R. Bonzagni
Attorney for Applicant
Registration No. 34779
Customer No. 27804
(413) 567-2076

Date: February 8, 2006

[03145P14]